

March 7, 2009

Students capture design win

By Terri Hallenbeck
Free Press Staff Writer

MONTPELIER -- The wing they designed looks like any old airplane wing, but with subtle fine-tuning, five South Burlington High School students rode it to victory.

The students nabbed first place in the state's first Real World Challenge by designing a computer model of an airplane wing that is more fuel-efficient on takeoff and landing. They were honored Friday at the Statehouse, where Lt. Gov. Brian Dubie -- an airline pilot -- quizzed them on their project.

Students Mike Gaffney, Alex Piper, Jonathon Girard, Varun tej Gonuguntla and Amsal Karic will go on to compete with teams from nine other states for the national title later this month.

The team of three seniors, a sophomore and a freshman worked down to the wire to come up with the winning design. In the final day as the deadline approached, team members skipped school, spent 16 hours hunkered down, ditched one model in favor of another and finished their work at 11:55 p.m. -- five minutes to spare.

"Everything these guys did was on their own," said their coach, South Burlington technology teacher Steve Barner. "All I did was make sure the door was unlocked, and the lights were on."

The students said they enjoyed pushing each other to find ways to overcome challenges that included using professional-grade software.

Piper, a sophomore, said working with software wasn't his strength, but he liked the problem-solving aspect.

Girard, a freshman, said he's interested in aeronautical engineering but hasn't had many of the high-level math courses yet. "He came up with a lot of the initial sketches," Barner said.

The team came out on top, not just because of the actual design they came up with, though Gaffney said it is 40-50 percent more fuel-efficient than a typical wing. They believe what put them over the top was their ability to show their work.

"They wanted to know our thought process, and we did a good job of explaining that," Piper said.

The students beat out two teams from Champlain Valley Union High School and one from Essex High School. This was the first year of the program, which is sponsored by the U.S. Department of Energy and meant to draw students into science and math careers.

Schools interested in next year's competition should contact Peter Drescher, education technology coordinator at the state Education Department, at 828-5149 or peter drescher@state.vt.us.

This year's winners will get an expenses-paid trip to Washington, D.C., where they will take on a new challenge against the nine other teams. Asked what he thought of the team's chances, Gaffney said, "One out of 10," sticking to the math all the way.
